DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer:Siegenthaler, Peter **Report No:** WIR-019407 **Address:** 333 Burma Road **Date Inspected:** 21-Jan-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: CWI Present: Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 Component: OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr.Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

ULTRASONIC TESTING

ZPMC NWIT No: 08253

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The members are identified as deck panel. The weld designations are as follows:

SEG3009B-092, 096, 100, 104, 108, 112, 116, 120, 124, 128, 132, 086, 082, 078, 074, 070, 066

SEG3009D-099, 100, 104, 105, 109, 110, 114, 115, 119, 120, 124, 125, 129, 130, 134, 135, 139, 140

This QA Inspector randomly observed the following work in progress.

OBG 14EAST

WELDING INSPECTION REPORT

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This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201087 performing the Shielded Metal Arc Welding process on weld 189 located at PCMK SEG3019BB. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair-1. Critical weld repair report identified as B-CWR2737.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066422 performing the Shielded Metal Arc Welding process on weld 125 located at PCMK SEG3019BB. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair-1. Critical weld repair report identified as B-CWR2737.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 070007 performing the Shielded Metal Arc Welding process on weld 169 located at PCMK SEG3019BB. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-345-SMAW-2G (2F)-Fcm-Repair-1. Critical weld repair report identified as B-CWR2737.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 043661 performing the Shielded Metal Arc Welding process on weld 125 located at PCMK SEG3019BB. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-345-SMAW-2G (2F)-Fcm-Repair-1. Critical weld repair report identified as B-CWR2737.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066480 performing the Shielded Metal Arc Welding process on weld 048 located at PCMK SEG3019AJ. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068994 performing the Flux Cored Arc Welding process on weld 179 located at PCMK SEG3019D-1. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G (3F)-ESAB-Repair-Fcm. Critical weld repair report identified as B-CWR2745.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066471 performing the Flux Cored Arc Welding process on weld 142 located at PCMK SEG3019M. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 217805 performing the Flux Cored Arc Welding process on weld 122 located at PCMK SEG3019M. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

OBG 13BE

During the random visual inspection of the OBG segment 13CE, this QA Inspector observed various linear indications in the root pass of the deck panel splice weld between DP3091 and DP3092. Weld number identified as SEG3009-007, the welding process identified as flux cored arc welding process (ESAB). This QA Inspector informed to ZPMC CWI, ABF QA and lead QA (CT), As per ABF QA and ZPMC CWI ZPMC will perform magnetic particle inspection and remove all linear indication prior welding another pass.

WELDING INSPECTION REPORT

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.







Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar, Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer